Communal Roosts of American Swallow-tailed Kites: Implications for Monitoring and Conservation

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American swallow-tailed kites (Elanoides forficatus), which are social and roost communally year-round, gather in exceptionally large numbers at the close of the breeding season in Florida. Late-season roosts, which may contain hundreds of kites, probably serve as premigration staging areas. The largest, located in 1987 by Brian Millsap, was studied from July-September 1992 and 1993 to develop census methods and to examine phenology, the potential for population monitoring, and the implications of roosting behavior for conservation. Photographs taken from fixedwing aircraft provided the best and most cost-effective estimates of total numbers, which peaked during late July (1550 in 1992; 2000 in 1993); 90% of total 1992 attendance was from 20 June to 18 August. Ground-based photographs of departing flocks revealed that the relative number of juveniles (young of the year) increased from 17% at the peak (predictable from observed nesting success and productivity) to 70% on 29 August, indicating that adults generally staged for shorter periods and did not migrate with their young. Photographs also permitted counts of adults in different stages of molt; observations at nests tentatively suggest that molt schedules may be related to breeding status (breeders molt later). Five kites radiotagged 80 km to the south provided data on attendance, foraging range, and activity, including cues for predicting migration. Tests of aerial searching methods using naive observers and smaller roosts provided a protocol for future surveys. Regular monitoring of large roosts should indicate trends in annual production and population size. Protection of large roost sites through acquisition of easement probably is essential to the long-term conservation of the United States population of swallow-tailed kites, which has been recommended for listing as endangered at state and federal levels.

REDUCING THE EFFECTS OF PIGEON FANCIER/PEREGRINE CONFLICT

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Conflicts usually involve passionate exchanges in the press. Although pigeon fanciers rarely affect healthy raptor populations, their public claims can alter the public's attitudes to raptors in general. The media can be used to respond but fanciers who are featured should also be met and veracity of their statements checked. This often embarrasses and removes them from debate. Many of the current perpetrators are the same people who killed raptors before protection. It is almost impossible to change the attitudes of these old fanciers. Policing is necessary to reduce their impact. During the change to a new generation it is possible to take advantage of better education. It is the role of wildlife authorities and naturalists to research the methods of the most successful fanciers and those who have the least losses. Fanciers that have a tolerant attitude can be empowered with facts about peregrine falcons (Falco peregrinus) and advice on reducing losses creating demand for knowledge from the less-tolerant fanciers. This can be done without bringing the clubs together and so increase their lobbying power. Information should be written to lessen inaccuracies in relay. Wildlife authorities, with their access to scientific literature, can forward articles on pigeons to create goodwill. Similarly, recovered pigeon rings should be returned to fanciers. Management should concentrate on fanciers changing their flying methods to reduce losses. Manipulating raptors should be a tactic of last resort and should only involve individual raptors. Situations in which it is practical are discussed.

Observations on Feeding Ecology of Striped Owls in Southeastern Brazil

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We studied the diet and prey selectivity of the poorly known striped owl (Asio clamator) occurring in a grassland savannah ("campo cerrado") in Sao Carlos, Sao Paulo State, southeastern Brazil (21°58'S, 47°52'W). Pellets (N = 31) and debris were collected between August 1992 and July 1993 beneath diurnal roosting sites in shrubs (Piptocarpharotundi folia, Compositae). Snap-trapping for small mammals was performed simultaneously with pellet collecting. Pellet and debris analysis yielded 136 prey items; of these, rodents comprised 53%, birds 24%, mouse opossums (Marmosa spp.) 15%, insects 6%, and bats 2%. Biomass estimates (total = 3591.8 g) showed rodents (65.6%) and birds (24.1%) to be the most important prey items followed by mouse opossums (8.7%), bats (1.4%), and insects (0.2%). It is interesting to point out that many small mammals were partially or completely arboreal (Oryzomys spp. and mouse opossums, 27.9% and 15.4% of 136 prey, respectively). Chi-square tests showed striped owl selectivity towards the poorly trapped Oryzomys nigripes and mouse opossums, whereas Bolomys lasiurus and Calomys callosus were more common in savannah than in pellets ($\chi^2 = 608.5$, df = 3, P < 0.0001). The first author was sponsored by CAPES and WWF-Brazil.

HURRICANE HUGO AND BALD EAGLES—MANAGEMENT IMPLICATIONS OF NATURE'S EXPERIMENT IN HABITAT ALTERATION

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